

REMARKS

Claims 1-2, 4-5, 7-8, 11-16, 19-21, 23-24, and 27-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (US Pat. No. 6,518,962 B2) in view of Routley et al. (Pub. No.: US 2006/0038758 A1).

Claims 3, 9-10, 25-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (US Pat. No. 6,518,962 B2) in view of Routley et al. (Pub. No.: US 2006/0038758 A1), and further in view of Stapleton et al. (US Pat. No. 5,019,807).

Claims 6 and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (US Pat. No. 6,518,962 B2) in view of Routley et al. (Pub. No.: US 2006/0038758 A1), and further in view of Sokolick et al. (US Pat. No. 6,608,439 B1).

Claims 17 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (US Pat. No. 6,518,962 B2) in view of Routley et al. (Pub. No.: US 2006/0038758 A1), and further in view of Soules (US Pat. No. 6,423,900 B1).

Claims 18 and 34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (US Pat. No. 6,518,962 B2) in view of Routley et al. (Pub. No.: US 2006/0038758 A1), and further in view of Troutman (US Pat. No. 6,157,356).

Claims 1-2, 4-13, 16, 18-27, 32, and 34 herewith are amended. Claims 14 and 30 have been canceled.

Reconsideration and allowance of the claims as amended is requested for the following reasons.

The present claimed invention is directed an array of OLED pixels that form a display device; and an additional OLED reference pixel external to the display device and located on a common substrate with the display device. The additional OLED reference pixel is deemed to have the same performance attributes as the OLED pixels in the display device. Specifically, the additional

OLED reference pixel has a voltage sensing circuit including a transistor connected to one of the terminals of the additional OLED reference pixel for sensing the voltage across the additional OLED reference pixel to produce a voltage signal representing the voltage across the additional OLED reference pixel. A measurement circuit is connected to the voltage signal that represents the voltage across the additional OLED reference pixel to produce an output signal representative of the performance attributes of the additional OLED reference pixel. An analysis circuit is connected to the measurement circuit to receive the output signal, compare the performance attributes with predetermined performance attributes, and produce a feedback signal in response thereto. The control circuit is responsive to the feedback signal to compensate for changes in the output of the array of OLED pixels.

Independent Claims 1 and 19 have been amended to emphasize the feature of an additional OLED pixel, external to the OLED pixels in the display. Support for the amended claim can be found in the specification in Figs. 1 and 2. Additional amendments to the respective dependent claims were made for consistency with the corresponding independent claim.

The 103 Rejections

Kimura does not disclose the use of an additional OLED pixel external to the display for purposes of providing signal analysis and measuring other performance attributes or display characteristics. The Applicant addresses the problem of changes in the display pixels by using an additional OLED pixel that is external to the device as a reference pixel that will provide voltage measurements, OLED pixel performance attributes, and display characteristics for the entire device. In sharp contrast, Kimura does not measure the voltage of an individual pixel external to the OLED display. Kimura's measurement is of the entire display.

Routley also does not teach the Applicant's claimed invention. Routley discloses a sensor for the input voltage (the input data value), the control connection. This input voltage is NOT the voltage on

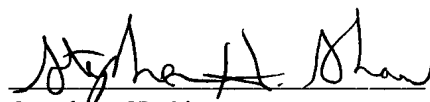
the OLED itself. A close review of Routley's figures reveals no measurement of the voltage across the OLED itself. (There is a simple current sensor in Fig. 7b). Figure 7a does not teach measuring the voltage across the OLED, but rather the gate voltage across a single transistor 642 for driving said transistor. Moreover, paragraph 0089, referenced by the Examiner, teaches measuring current (which is more difficult than measuring than voltage) using a signal or a photodiode.

Accordingly, the Examiner has failed to make a prima facie case, because at least one of Applicant's features is missing in the cited combination. It is believed that independent claims 1 and 19 are unobvious in light of the combination Kimura in view of Routley. The remaining claims are dependent from these claims and are considered to be patentable for at least the same reasons.

Applicants have reviewed the cited art made of record, and believe that singly or in any suitable combination, they do not render Applicants' claimed invention unpatentable. It is believed that the claims in the application are allowable over the cited art and such allowance is respectfully requested.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company's Patent Operations at (585) 477-4656.